#### REMARKS

Claims 16-26 are pending in this application. By this Amendment, claims 1-15 are canceled and claims 16-26 are added. Support for new claims 16-26 is found in, for example, canceled claims 1-15 and in the sequence listing.

# **Objections**

The Examiner objected to claims 5, 12 and 13 and to the abstract of the disclosure.

Claims 5, 12 and 13 have been canceled and new claims 16-26 do not contain the objected to informalities. In addition, the abstract has been amended to, *inter alia*, remove the objected to term. Regarding the objection to claim 5, Applicants note that the use of "n" to represent more than one possible nucleotide is acceptable. *See* MPEP 2422, Table 1 ("List of Nucleotides," wherein "n" is defined as "a or g or c or t/u, unknown, or other").

In view of the foregoing and of the acceptable and appropriate use of "n" in SEQ ID NOS: 1-4, Applicants respectfully submit that the objections have been sufficiently addressed.

#### Rejection under 35 U.S.C. § 101

The Examiner rejected claims 1-3, 5, 6, 10, 14 and 15 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicants respectively traverse the rejection.

Solely in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicants have canceled claims 1-3, 5, 6, 10, 14 and 15. New claims 16-26 are directed to statutory subject matter, and thus withdrawal of the rejection is respectfully requested.

# Rejections under 35 U.S.C. § 112, first paragraph

1. The Examiner rejected claims 1-15 under 35 U.S.C. § 112, first paragraph, for containing subject matter not described in the specification in such a manner as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed. Applicants respectfully traverse the rejection.

It is the Examiner's position that Applicants' disclosure fails to provide a representative number of species to describe the genus claimed, and that the identity of the probe of claim 14 is inadequately described because that identity is based solely on a method of amplification with a primer. The Examiner stated that the language "consisting of" to describe the claimed sequences would satisfy the written description requirement.

Solely in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicants have canceled claims 1-15. New claims 16 and 17, upon which claims 18-26 depend, are directed to oligonucleotides consisting of a particular sequence as suggested by the Examiner.

In view of the foregoing, withdrawal of the rejection is respectfully requested.

2. The Examiner rejected claim 15 under 35 U.S.C. § 112, first paragraph, because the specification does not reasonably provide enablement for gene therapy probes and does not enable one of skill in the art to make and use the invention commensurate in scope with the claim. Applicants respectfully traverse the rejection.

Solely in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicants have canceled claim 15. New claims 16-26 are not directed to gene therapy probes. Thus, the rejection is most and withdrawal thereof is respectfully requested.

# Rejection under 35 U.S.C. § 112, second paragraph

The Examiner rejected claims 1-15 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Applicants respectfully traverse the rejection.

Solely in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicants have canceled claims 1-15. New claims 16-26 do not contain the allegedly indefinite term. Thus, the rejection is most and withdrawal thereof is respectfully requested.

# Rejection under 35 U.S.C. § 102

The Examiner rejected claims 1-3 and 6-15 under 35 U.S.C. § 102(b) as being anticipated by Fraser (WO 98/59034) ("Fraser"). Applicants respectfully traverse the rejection.

Solely in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicants have canceled claims 1-3 and 6-15. New claims 16-26 are not anticipated by Fraser.

Regarding new oligonucleotide claims 16 and 17, these claims correspond to canceled claims 4 and 5, which were not rejected and are not anticipated by Fraser.

Regarding new method claims 18-26, these dependent claims are also not anticipated by Fraser. Claims 18-26 are directed to methods of determining whether bacteria from the order Spirochaetales is present in a sample using the oligonucleotides of claims 16 and/or 17. Fraser is directed to polynucleotides of the *Treponema pallidum* genome and methods for identifying the polynucleotides.

In order to anticipate a claim, a reference must expressly or implicitly disclose every element of the claim. Fraser fails to disclose the oligonucleotides required to practice the

methods of claims 18-26, and thus fails to disclose methods of using these oligonucleotides to determine the presence of Spirochaetales bacteria in a sample.

In view of the foregoing, withdrawal of the rejection is respectfully requested.

## **Double Patenting**

The Examiner objected to claims 6, 10 and 15 under 37 C.F.R. § 1.75 as being substantial duplicates of claim 1.

Applicants note that the Examiner's explanation for the double patenting objection indicates that such an objection "is proper after allowing one claim." Office Action, p. 8.

The Examiner did not indicate that claims 1, 6, 10 and/or 15 contain allowable subject matter. Regardless, solely in an effort to expedite prosecution and without acquiescing in the propriety of the rejection, Applicants have canceled claims 1-15. New claims 16-26, which also contain allowable subject matter, are not duplicative of one another. Thus, the rejection is moot and withdrawal thereof is respectfully requested.

## **Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 16-26 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Date: June 23, 2006

WPB:KKV/kkv

Attachment:

Amended Abstract

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